Commonwealth of Kentucky

Environmental and Public Protection Cabinet Department for Environmental Protection

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

Final

AIR QUALITY PERMIT Issued under 401 KAR 52:030

Permittee Name: Cymetech, LLC

Mailing Address: P.O. Box 859, Calvert City, Kentucky 42029

Source Name: Cymetech, LLC

Mailing Address: P.O. Box 859, Calvert City, Kentucky 42029

Source Location: 2468 Industrial PKWY, Calvert City, KY 42029

Permit Number: F-05-050 Source A. I. #: 46167

Activity #: APE20040001

Review Type: Conditional Major/Operating, Syn. Minor, NSPS

Source ID #: 21-157-00061

Regional Office: Paducah Regional Office

130 Eagle Nest Drive Paducah, KY 42003-9435

(270) 898-8468

County: Marshall

Application

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John S. Lyons, Director Division for Air Quality

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	Initial Issuance, Operating, Conditional Major/Synthetic Minor		02/18/04	07/25/06	Initial Issuance, Operating, Conditional Major/Synthetic Minor

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable Permits for Non-major Sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

T01 Dicyclopentadiene Crackers

01 (H-300) Dicyclopentadiene Cracker

Primary Fuel: Westlake Fuel Gas

Secondary Fuel: Natural Gas (Emergency Only)

Construction Date: 1996 Rated Capacity: 3 mmBtu/hr Control Equipment: None

02 (H-301) Dicyclopentadiene Cracker

Primary Fuel: Westlake Fuel Gas

Secondary Fuel: Natural Gas (Emergency Only)

Construction Date: 1997 Rated Capacity: 5 mmBtu/hr Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 59:015, *New Indirect Heat Exchangers*, applies to indirect heat exchangers having a heat input capacity of more than one (1) mmBtu/hr.

1. **Operating Limitations:**

None

2. <u>Emission Limitations</u>:

- a. Pursuant to 401 KAR 59:015, Section 4(1)(a), no owner or operator shall cause to be discharged into the atmosphere from each dicyclopentadiene cracker particulate matter emissions in excess of 0.56 lb/mmBtu of actual heat input.
- b. Pursuant to 401 KAR 59:015, Section 4(2), no owner or operator shall cause to be discharged into the atmosphere from each dicyclopentadiene cracker particulate matter emissions which exhibit greater than twenty (20) percent opacity except:
 - i. A maximum of forty (40) percent opacity shall be permissible, from each dicyclopentadiene cracker, for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. For emissions from each dicyclopentadiene cracker during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- c. Pursuant to 401 KAR 59:015, Section 5(1)(a), no owner or operator shall cause to be discharged into the atmosphere, from each dicyclopentadiene cracker, SO₂ emissions in excess of 3.0 lb/mmBtu of actual heat input.

Compliance Demonstration Method:

Compliance with the particulate matter, opacity, and SO_2 limits are demonstrated by the combustion of natural gas or Westlake fuel gas. The permittee shall demonstrate compliance by monitoring the parameters required under <u>4. Specific Monitoring Requirements</u> and by maintaining the records required under <u>5. Specific Recordkeeping Requirements</u>.

3. <u>Testing Requirements</u>:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 52:030, Section 10, 401 KAR 59:005, Section 2(2) and 401 KAR 50:045.

4. **Specific Monitoring Requirements:**

The permittee shall monitor and maintain records of the following information for the two dicyclopentadiene crackers:

- a) The monthly Westlake fuel gas and natural gas usage (cubic feet/month).
- b) The fuel gas heat content determined by Westlake CA&O Corporation in accordance with 40 CFR 60.18(f)(3) and Permit No. V-02-022 for EP 321 (Ethylene Plant flare).

Note: The facility may continue to use the gas meter in the gas feed line that supplies both dicyclopentadiene crackers to monitor the total gas usage of the two dicyclopentadiene crackers.

5. **Specific Recordkeeping Requirements:**

The permittee shall maintain records of the type and monthly amount of fuel used, and fuel gas heat content for the dicyclopentadiene crackers.

6. Specific Reporting Requirements:

None

7. **Specific Control Equipment Operating Conditions**:

None

8. Alternate Operating Scenarios:

None

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

T02 Dicyclopentadiene Process Units

- 03 (CL-300, Distillation Column CL-300 and Reflux Drum (TK-302)
 - TK-302) **Description**: TK-302, which maintains the volume of cyclopentadiene for reflux to the CL-300 column, vents to TK-312 (EP T02-05) which is connected to the Westlake CA&O Ethylene Plant Flare

Construction Date: 1996 **Storage Capacity**: 640 gallons

Control Equipment: Westlake CA&O Ethylene Plant Flare (EP #321 in V-00-022)

- 04 (CL-301, Lights/NBA Distillation Columns CL-301, CL-302 to Vacuum Condensate
 - CL-302, **Drum** (**TK-316**)
 - TK-316) **Description**: TK-316 receives liquid discharge from the vacuum pump, which is then pumped to TK-312 or recovered in the dicyclopentadiene product. TK-316 also vents to TK-312, which is connected to the Westlake CA&O Ethylene Plant Flare.

Construction Date: 1996 **Storage Capacity**: 50 gallons

Control Equipment: Westlake CA&O Ethylene Plant Flare (EP #321 in V-00-022)

- 05 (TK-312, Blowdown Tank for Distillation Column CL-302
 - CL-302) **Description**: Tank TK-312 receives CL-302 bottom streams; streams from relief valve vents, pump drains, flasher bottoms, Vacuum Condensate Drum (TK-316); and vents from tanks TK-302 and TK-316. TK-312 is connected to the Westlake CA&O Ethylene Plant Flare.

Construction Date: 1996

Storage Capacity: 1,150 gallons

Control Equipment: Westlake CA&O Ethylene Plant Flare (EP #321 in V-00-022)

Description: The Westlake CA&O Corporation (AFS No. 21-157-00039) ethylene plant flare (EP-321) is used to burn hydrocarbon streams from the contiguous Westlake CA&O ethylene plant and process vent emissions from the Cymetech, LLC plant.

APPLICABLE REGULATIONS:

The source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017 – *Prevention of significant deterioration of air quality*, and 401 KAR 52:020, *Title V permits*, for VOC.

401 KAR 60:005, which incorporates by reference 40 CFR 60, Subpart NNN, Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations. This regulation applies to each process unit that produces any of the chemicals listed in 40 CFR 60.667 as a product, co-product, byproduct, or intermediate. This regulation applies to distillation columns CL-300, CL-301, and CL-302 and their recovery systems.

APPLICABLE REGULATIONS (Continued):

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances. See **Section D - Source Emission Limitations and Testing Requirements** for source wide limitations.

40 CFR 60.18, Subpart A, *General Control Device Requirements*, applies to the Westlake CA&O ethylene flare (EP #321 in V-00-022). The permittee has chosen to comply with the emission control provisions of 40 CFR 60, Subpart NNN using the Westlake CA&O ethylene flare (EP #321 in V-00-022). The Westlake permit V-00-022 contains enforceable requirements to ensure operation of the flare in compliance with 40 CFR 60.18, as required by 40 CFR 60, Subpart NNN and 401 KAR 63:015, *Flares*. These requirements are not duplicated in this permit.

40 CFR 60, Subpart A, *General Provisions*, applies to the Westlake CA&O ethylene flare (EP # 321 in V-00-022). Applicable provisions include those other than 40 CFR 60.18 above.

State-Origin Applicable Regulations:

401 KAR 63:021, *Existing Sources Emitting Toxic Air Pollutants*, applies to sources which were issued a permit pursuant to 401 KAR 50:035 with conditions based on this administrative regulation or 401 KAR 63:022. See **Section D - Source Emission Limitations and Testing Requirements** for source wide limitations.

NON-APPLICABLE REGULATIONS:

40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Manufacturing Industry does not apply because the facility does not produce as a product, intermediate, or byproduct, any of the chemicals listed in 40 CFR 60.489.

1. Operating Limitations:

a. The permittee shall comply with the source operating limitations of **Section D - Source Emission Limitations and Testing Requirements**.

Compliance Demonstration Methods:

See Section D.3 - Source Emission Limitations and Testing Requirements, *Compliance Demonstration Methods*.

b. The permittee shall comply with applicable requirements of 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart NNN.

Compliance Demonstration Methods:

To comply with the requirements of 40 CFR 60.662(b) as specified below, the permittee shall send all required vapor streams from the Dicyclopentadiene process units T02 to the contiguous Westlake CA&O ethylene flare (EP # 321 in V-00-022).

If any of the Dicyclopentadiene process units T02 are in operation during any period the Westlake CA&O ethylene flare (EP#321 in V-00-022) is not operating in accordance with <u>7.</u> **Specific Control Equipment Operating Conditions**, the permittee shall cease operating the Dicyclopentadiene process units as follows:

i. If the ethylene flare (EP#321 in V-00-022) has not been relit within 20 minutes, the

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

permittee shall begin an orderly shutdown of the Dicyclopentadiene process units.

- ii. The steam and material feed to the process units may be decreased gradually as necessary to prevent damage to process equipment.
- iii. Nitrogen may be purged through the dicyclopentadiene crackers and vented to the ethylene flare (EP#321 in V-00-022) as necessary to cool the furnaces.
- c. In accordance with 40 CFR 60.662(b), the contiguous Westlake CA&O ethylene flare (EP # 321 in V-00-022) shall meet the requirements of 40 CFR 60.18.

Compliance Demonstration Methods:

For compliance with 40 CFR 60.18, refer to **Section D.3 - Source Emission Limitations** and **Testing Requirements**, *Compliance Demonstration Methods*.

2. Emission Limitations:

The permittee shall comply with the source emission limitations of **Section D - Source Emission Limitations and Testing Requirements**.

Compliance Determination Methods:

See Section D.3 - Source Emission Limitations and Testing Requirements, *Compliance Demonstration Methods*.

3. <u>Testing Requirements</u>:

- a. Pursuant to 40 CFR 60, Subpart NNN, 60.664(a), during any performance test to demonstrate compliance with the operating limitations, all the process units shall be run at full operating conditions and flow rates.
- b. The permittee shall conduct a performance test of the Westlake CA&O ethylene flare (EP#321 in V-00-022) within 180 days of issuance of date of the final permit in accordance with the methods specified by 40 CFR 60.8 and 60.664.

4. Specific Monitoring Requirements:

- a. Pursuant to 40 CFR 60 Subpart NNN, 60.663(b), the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications the following equipment:
 - i. A heat sensing device, such as an ultra-violet beam sensor or thermocouple, at the pilot light to indicate the continuous presence of a flame.
 - ii. A flow indicator that provides a record of vent stream flow to the flare at least once every hour for each affected facility. The flow indicator shall be installed in the vent stream from each affected facility at a point closest to the flare before joined with any other vent stream.
- b. The permittee shall ensure proper operation of the Westlake CA&O ethylene flare (EP #321 in V-00-022) in accordance with **7. Specific Control Equipment Operating**

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Conditions.

c. Refer to **Section D - Source Emission Limitations and Testing Requirements** for source wide monitoring requirements.

5. **Specific Recordkeeping Requirements:**

- a. Pursuant to 40 CFR 60.665, the owner or operator shall keep up to date, readily accessible records of the following for at least 5 years:
 - i. All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test, continuous records of the flare pilot flame monitoring, and records of all periods of operations during which the pilot flame is absent. [40 CFR 60.665(b)(3)]
 - i. The flare pilot flame continuous monitoring required under <u>4. Specific Monitoring Requirements</u> for Westlake CA&O ethylene flare (EP #321 in V-00-022) [40 CFR 60.665 (f)]. These records shall be obtained from Westlake at least semi-annually in order to prepare the semi-annual monitoring report in accordance with <u>6. Specific Reporting Requirements</u>.
 - ii. All periods when the vent stream is diverted from the control device or has no flow rate [40 CFR 60.665(d)], and
 - iii. The flare pilot flame monitoring specified under 40 CFR 60.663(b), as well as up-to-date, readily accessible records of all periods of operations in which the pilot flame is absent. [40 CFR 60.665(f)]
- b. The occurrence, duration, cause, and any corrective action taken for each incident when the Dicyclopentadiene process units T02 are in operation but the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with <u>7. Specific Control Equipment Operating Conditions</u>.
- c. Refer to Section D Source Emission Limitations and Testing Requirements for source wide recordkeeping requirements.

Specific Reporting Requirements:

- a. Pursuant to 40 CFR 60.665(l), the owner or operator shall submit to the Division semiannual reports of the following recorded information:
 - i. All periods when the vent stream is diverted from the control device or has no flow rate, [40 CFR 60.665(d)] and
 - ii. All periods in which the pilot flame is absent. [40 CFR 60.665(d)]
- b. The permittee shall submit a report of the occurrence, duration, cause, and any corrective action taken for each incident when the process units are in operation but the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with <u>7.</u>

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Specific Control Equipment Operating Conditions to the Division for Air Quality's Paducah Office immediately.

c. See **Section D - Source Emission Limitations and Testing Requirements** for source wide reporting requirements.

7. <u>Specific Control Equipment Operating Conditions</u>:

The permittee shall comply with the requirements of **Section E - Source Control Equipment Requirements** for the Westlake CA&O ethylene flare (EP #321 in V-00-022).

8. Alternate Operating Scenarios:

Pursuant to 40 CFR 60.660(d), the permittee may comply with 40 CFR 65 Subpart D, *Consolidated Federal Air Rule; Synthetic Organic Chemical Manufacturing Industry*, as an alternate to 40 CFR 60 Subpart NNN, as specified below:

- a. Owners or operators of process vents subject to 40 CFR 60 Subpart NNN may choose to comply with the provisions of 40 CFR Part 65, Subpart D (Consolidated Federal Air Rule; Synthetic Organic Chemical Manufacturing Industry), to satisfy the requirements of 40 CFR 60.662 through 60.665 and 60.668. The provisions of 40 CFR Part 65 also satisfy the criteria of paragraphs 40 CFR 60.660(c)(4) and (6). Other provisions applying to an owner or operator who chooses to comply with 40 CFR 65 are provided in 40 CFR 65.1. [40 CFR 60.660(d)(1)]
- b. Owners or operators who choose to comply with 40 CFR Part 65, Subpart D, must also comply with 40 CFR 60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those process vents. All sections and paragraphs of 40 CFR 60, Subpart A that are not mentioned in this paragraph (b) do not apply to owners or operators of process vents complying with 40 CFR Part 65, Subpart D, except that provisions required to be met prior to implementing 40 CFR Part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, Subpart D, must comply with 40 CFR Part 65, Subpart A. [40 CFR 60.660(d)(2)]

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

T03 Storage Tank Operations

06 (TK-300A) Horizontal Fixed Roof Tank Storing Resin Oil Feedstock

Construction Date: 1996

Storage Capacity: 57,500 gallons, Tank Diameter 12 feet

Control Equipment: Westlake CA&O Ethylene Plant Flare (EP #321 in V-00-

022)

Control Efficiency: 99.8%

07 (TK-300B) Horizontal Fixed Roof Tank Storing Resin Oil Feedstock

Construction Date: 1996

Storage Capacity: 57,500 gallons, Tank Diameter 12 feet

Control Equipment: Westlake CA&O Ethylene Plant Flare (EP #321 in V-00-

022)

Control Efficiency: 99.8%

08 (TK-305) Horizontal Fixed Roof Tank Storing Resin Former Product

Construction Date: 1996

Storage Capacity: 53,300 gallons, Tank Diameter 12 feet

Control Equipment: Westlake CA&O Ethylene Plant Flare (EP #321 in V-00-

022)

Control Efficiency: 99.8%

09 (TK-306) Horizontal Fixed Roof Tank Storing MCPDD/Resin Oil Heavies Product

Construction Date: 1996

Storage Capacity: 28,300 gallons, Tank Diameter 12 feet

Control Equipment: Westlake CA&O Ethylene Plant Flare (EP #321 in V-00-

022)

Control Efficiency: 99.8%

10 (TK-307) Horizontal Fixed Roof Tank Storing Trade DCPD Product

Construction Date: 1996

Storage Capacity: 53,300 gallons, Tank Diameter 12 feet

Control Equipment: Westlake CA&O Ethylene Plant Flare (EP #321 in V-00-

022)

Control Efficiency: 99.8%

11 (TK-308) Horizontal Fixed Roof Tank Storing Dicyclopentadiene (DCPD) Product

Construction Date: 1996

Storage Capacity: 53,300 gallons, Tank Diameter 12 feet

Control Equipment: Westlake CA&O Ethylene Plant Flare (EP #321 in V-00-

022)

Control Efficiency: 99.8%

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

APPLICABLE REGULATIONS:

Self imposed voluntary limitations to preclude 401 KAR 51:017 – Prevention of significant deterioration of air quality, and 401 KAR 52:020, Title V permits.

401 KAR 60:005, which incorporates by reference federal regulation 40 CFR 60, Subpart Kb (40 CFR 60 112b), Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984, applies to each volatile organic liquid storage vessel with a capacity greater than or equal to 75 m³ except for storage vessels with a capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor less than 3.5 kPa or with a capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15 kPa. This regulation is applicable only to TK-307.

State-Origin Applicable Regulations:

401 KAR 63:021, *Existing Sources Emitting Toxic Air Pollutants*, applies to sources which were issued a permit pursuant to 401 KAR 50:035 with conditions based on this administrative regulation or 401 KAR 63:022. See **Section D - Source Emission Limitations and Testing Requirements** for source wide limitations.

NON-APPLICABLE REGULATIONS:

40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Manufacturing Industry does not apply because the facility does not produce as a product, intermediate, or byproduct, any of the chemicals listed in 40 CFR 60.489.

1. **Operating Limitations:**

a. See **Section D - Source Emission Limitations and Testing Requirements** for source wide emission limitations.

Compliance Determination Methods:

See Section D.3 - Source Emission Limitations and Testing Requirements, *Compliance Demonstration Methods*.

b. The source is permitted to load or unload tank trucks and rail cars when the Westlake CA&O ethylene flare is not in operation. Emissions from loading or unloading of the tank trucks and rail cars shall be vented to a vapor recovery system when the flare is not in operation.

2. Emission Limitations:

See Section D - Source Emission Limitations and Testing Requirements for source wide emission limitations.

Compliance Determination Methods:

See Section D.3 - Source Emission Limitations and Testing Requirements, *Compliance Demonstration Methods*.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. <u>Testing Requirements:</u>

Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 52:030, Section 10 and 401 KAR 50:045.

4. **Specific Monitoring Requirements:**

Refer to **Section D - Source Emission Limitations and Testing Requirements** for source wide monitoring requirements.

5. **Specific Recordkeeping Requirements:**

- a. Pursuant to 40 CFR 60, Subpart Kb, 40 CFR 60.116b, for Trade DCPD Product Storage Tank EP10 (TK-307)) the permittee shall maintain the following records:
 - i. Readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source; and
 - ii. A record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
- b. The permittee shall maintain records of the occurrence, duration, cause, and any corrective action taken for each incident when the storage vessels are in operation but the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with **7. Specific Control Equipment Operating Conditions**.
- c. Refer to <u>Section D Source Emission Limitations and Testing Requirements</u> for source wide recordkeeping requirements.

Specific Reporting Requirements:

- a. The permittee shall submit a report of the occurrence, duration, cause, and any corrective action taken for each incident when the storage vessels are in operation but the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with <u>7. Specific Control Equipment Operating Conditions</u> to the Division for Air Quality's Paducah Office immediately.
- b. Refer to **Section D Source Emission Limitations and Testing Requirements** for source wide reporting requirements.

7. Specific Control Equipment Operating Conditions:

The permittee shall comply with the requirements of **Section E - Source Control Equipment Requirements** for the Westlake CA&O ethylene flare (EP #321 in V-00-022).

8. Alternate Operating Scenarios:

None

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SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	Generally Applicable Regulation
1.	CT-300 A/B Cooling Towers Water treatment chemicals: Non chromium-based, Two (2) fans for both: each rated at 167,200 acfm and 4000 gpm circulation rate	401 KAR 59:010
2.	TK-303 MPCD Drum Storage Capacity: 43 gallons (vents to the Westlake flare)	None
3.	TK-304 Inhibitor Storage tank Storage Capacity: 180 gallons (vents to the Westlake flare)	None
4.	305L Resin Former Loading Maximum Throughput: 9,198,000 gal/yr (vents to either the Westlake flare or a vapor recovery system)	None
5.	306L MCPDD/Resin Oil Heavies Loading Maximum Throughput: 2,190,000 gal/yr (vents to either the Westlake flare or a vapor recovery system)	None
6.	307L Trade DCPD Product Loading Maximum Throughput: 5,350,000 gal/yr (vents to either the Westlake flare or a vapor recovery system)	None
7.	308L Dicyclopentadiene (DCPD) Product Loading Maximum Throughput: 4,599,000 gal/yr (vents to either the Westlake flare or a vapor recovery system)	None

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SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Description		Generally Applic	cable Regulation
8. 312L Blowdown Loa Maximum Throughp (vents to either the W vapor recovery syste	out: 2,190,000 gal/yr Vestlake flare or a	N	one
9. TK-313 Inhibitor Ma Rated Capacity: 180	-	N	one
10. TK-350 Decoking Po 450 pounds per hour	ot of coke-containing air	40)1 KAR 59:010
11. Y1 DCPD Drum Loa 100 drums filled/mor carbon bed)		40	01 KAR 63:021
12. Y2 Resin Former Dr 20 drums filled/mont carbon bed)	_	40	01 KAR 63:021
13. FUG- Equipment Le 8,760 hours of opera	•	40	01 KAR 63:021
14. Pressure Relief Valv	es	N	one
15. Lab Hoods		N	one
16. PRG Nitrogen Purgir Purge 730 Tank Cars	ng Tank Cars & Tankers s/yr	40	01 KAR 63:021
17. RPKG Repackaging Maximum Throughp		N	one
18. Dryer- Molecular Sie pounds sieve capacit	- ·	40	01 KAR 63:021

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources incorporated by reference in 401 KAR 52:030 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Volatile organic compound (VOC) emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

3. <u>Source Emission Limitations:</u>

A. APPLICABLE REQUIREMENTS:

- (1) Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.
- (2) Pursuant to 401 KAR 63:021, source wide emissions of dicyclopentadiene shall not exceed 2.02 lb/hr.
- (3) Pursuant to 401 KAR 63:021, source wide emissions of cyclopentadiene shall not exceed 13.86 lb/hr.

Compliance Demonstration Methods:

- (1) During periods of normal operation of the Westlake CA&O ethylene flare (EP #321 in V-00-022), the permittee shall monitor and maintain the records required under <u>5.</u> <u>Monitoring Requirements</u> and <u>6. Specific Recordkeeping Requirements</u>.
- (2) If the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with **Section E Source Control Equipment Requirements**, the permittee shall cease operations of the Dicyclopentadiene process units in accordance with **1.d. of Section B for T02 Dicyclopentadiene Process Units**.
- (3) If the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with **Section E Source Control Equipment Requirements**, the permittee shall cease transferring materials into and out of the EP06 (TK-300A) Resin Oil Storage Tank, EP07 (TK-300B) Resin Oil Storage Tank, EP08 (TK-305) Resin Former Storage Tank, EP09 (TK-306) MCPDD/Resin Oil Heavies Storage Tank, EP10 (TK-307) Trade DCPD Product Storage Tank, and EP11 (TK-308) Dicyclopentadiene (DCPD) Product Storage Tank once the Dicyclopentadiene process units have been shut down in accordance with **1.d of Section B for T02 Dicyclopentadiene Process Units** until corrective actions are completed.

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

B. CONDITIONAL MAJOR/SYNTHETIC MINOR REQUIREMENTS:

(1) **Emission Limitations**:

To preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, and 401 KAR 52:020, *Title V permits*, the following source wide emission limits shall apply:

- a. Volatile organic compound (VOC) emissions: 90 tons per year;
- b. Combined hazardous air pollutant (HAP) emissions: 22.5 tons per year; and
- c. Single hazardous air pollutants (HAPs) emissions: 9 tons per year.

Compliance Demonstration Methods:

During periods of normal operation of the Westlake CA&O ethylene flare (EP #321 in V-00-022), the permittee shall monitor and maintain the records required under <u>5.</u> Specific Monitoring Requirements and <u>6. Specific Recordkeeping Requirements</u>.

(2) **Operating Limitations:**

In order to make the conditional major/synthetic minor emission limits enforceable as a practical matter, resin oil throughput for the plant shall not exceed 14,336,000 gallons in any twelve (12) consecutive month period.

Compliance Demonstration Methods:

The permittee shall monitor and maintain records of monthly and consecutive twelve (12) month totals of resin oil received in the EP06 (TK-300A) Resin Oil Storage Tank and the EP07 (TK-300B) Resin Oil Storage Tank. The calculation must be completed by the end of the month following the month in question and the consecutive 12-month totals include the totals for the month in question plus the totals for the previous 11 month period (e.g., for the month January, the compliance demonstration shall be completed in February and shall include all data from February of the previous year to the last day of January).

4. Specific Monitoring Requirements:

- a. The permittee shall ensure proper operation of the Westlake CA&O ethylene flare (EP #321 in V-00-022) in accordance with requirements of Section E Source Control Equipment Requirements for the Westlake CA&O ethylene flare (EP #321 in V-00-022).
- b. The permittee shall monitor and maintain records of monthly and consecutive twelve (12) month totals of resin oil received in the EP06 (TK-300A) Resin Oil Storage Tank and the EP07 (TK-300B) Resin Oil Storage Tank.

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

5. **Specific Recordkeeping Requirements:**

The permittee shall maintain records that are readily accessible of the following information:

- a. The occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation, but the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with Section E Source Control Equipment Requirements;
- b. Results of resin oil throughput calculations required in accordance with the Operating Limitations (above).

6. **Specific Reporting Requirements:**

The permittee shall report to the Division in accordance with **Section F** the following information:

- a. The occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with **Section E Source Control Equipment Requirements** immediately;
- b. Results of resin oil throughput calculations required in accordance with the Operating Limitations (above).

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

- 2. The permittee shall monitor operation of the Westlake CA&O ethylene flare (EP #321 in V-00-022) as follows:
 - a. The permittee shall coordinate with Westlake CA&O Corporation, AFS No. 021-157-00039, such that Westlake agrees to notify the permittee immediately when the flare is not operating in accordance with 40 CFR 60.18. This notification shall be recorded in a logbook.
 - b. The permittee shall take notice of the flare periodically during operation of the Dicyclopentadiene process units and storage tanks. The permittee shall notify Westlake immediately if unusual emissions are observed. This notification shall be recorded in a logbook.
 - c. The permittee shall cease operation of the Dicyclopentadiene process and storage tanks as described in **Section B Emission Points, Emissions Units, Applicable Regulations, And Operating Conditions** if the flare is not operating in accordance with 40 CFR 60.18 within 20 minutes of notification as required in paragraphs 2.a. or 2.b. above.

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SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)(1) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a. Date, place (as defined in this permit), and time of sampling or measurements;
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality[401 KAR 52:030 Section 3(1)(f)1a and Section 1a (7) of the Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources incorporated by reference in 401 KAR 52:030 Section 10].
 - 3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

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SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. All deviations from permit requirements shall be clearly identified in the reports.

- In accordance with the provisions of 401KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
- The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.5 [Section 1b V(3) and (4) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of each term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annua compliance certifications should be mailed to the following addresses:

Division for Air Quality
Paducah Regional Office
Central Files
4500 Clarks River Road
Paducah, KY 42003
Prankfort, KY 40601

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission survey is mailed to the permittee. If a KYEIS emission report is not mailed to the permittee, comply with all other emission reporting requirements in this permit.
- 11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.
- 12. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
 - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
 - i. The size and location of both the original and replacement units; and
 - ii. Any resulting change in emissions;
 - b. The PTE of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
 - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
 - d. The replacement unit shall comply with all applicable requirements; and
 - e. The source shall notify Regional office of all shutdowns and start-ups.
 - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
 - i. Re-install the original unit and remove or dismantle the replacement unit; or
 - ii. Submit an application to permit the replacement unit as a permanent change.

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SECTION G - GENERAL PROVISIONS

(a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a (2) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a (5) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 4. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
- 5. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Sections 1a (6) and (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

6. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

- 7. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a (11) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 8. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a (3) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 9. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a (12)(b) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 10. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a (9) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 11. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
- 12. This permit does not convey property rights or exclusive privileges [Section 1a (8) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 13. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- 15. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- 17. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (a) Applicable requirements that are included and specifically identified in this permit; and
 - (b) Non-applicable requirements expressly identified in this permit.
- 18. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].
- 19. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

(c) <u>Permit Revisions</u>

- 1. Minor permit revision procedures specified in 401 KAR 52:030 Section 14 (3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14 (2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u> No construction is authorized by this permit.

(e) <u>Acid Rain Program Requirements</u>

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) <u>Emergency Provisions</u>

- 1. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
- 2. Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
- 3. Emergency conditions listed in General Provision G(f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
- 4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 3346 Merrifield, VA, 22116-3346 **Permit Number:** <u>F-05-050</u> **Page:** <u>25</u> **of** <u>30</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

T02- Dicyclopentadiene Process Units

(1) Compliance with 40 CFR 65 Subpart D, Consolidated Federal Air Rule; Synthetic Organic Chemical Manufacturing Industry, as an alternate to 40 CFR 60 Subpart NNN.

If the permittee elects to operate in accordance with this alternate operating scenario, a notation will be made in a logbook and the following requirements will replace requirements in Section B of the permit as indicated below.

Section B - Emission Points, Emissions Units, Applicable Regulations, and Operating Conditions

T02 Dicyclopentadiene Process Units

APPLICABLE REGULATIONS:

The provisions of 40 CFR 65 Subpart D, *Process Vents*, and Subpart A, applies to regulated material emissions from process vents where a referencing subpart references the use of this Subpart.

1. **Operating Limitations:**

- a. Pursuant to 40 CFR 65.63(a)(1), the owner or operator shall combust the emissions in the Westlake CA&O ethylene flare (EP #321 in V-00-022).
- b. Pursuant to 40 CFR 65.142(b)(1), owners or operators subject to 40 CFR 65.63(a)(1) who route process vent emissions to a flare shall meet the applicable requirements in 40 CFR 65.143 for closed vent systems.
- c. Pursuant to 40 CFR 65.143(a)(1), each closed vent system shall be designed and operated to collect the regulated material vapors from the emission point and to route the collected vapors to a control device
- d. Pursuant to 40 CFR 65.143(a)(2), closed vent systems used to comply with the provisions of this Subpart shall be operated at all times when emissions are vented to them.

Compliance Demonstration Methods:

- i. The permittee shall demonstrate compliance by maintaining the records required under Specific Recordkeeping Requirements (below) and by complying with Specific Control Equipment Operating Conditions (below).
- ii. If any of the Dicyclopentadiene process units are in operation during any period the Westlake CA&O ethylene flare (EP#321 in V-00-022) is not operating in accordance with Specific Control Equipment Operating Conditions (below), the permittee shall cease operating the Dicyclopentadiene process units as follows:
 - A. If the ethylene flare (EP#321 in V-00-022) has not been relit within 20 minutes, the permittee shall begin an orderly shutdown of the Dicyclopentadiene process units.
 - B. The steam and material feed to the process units may be decreased gradually as necessary to prevent damage to process equipment.
 - C. Nitrogen may be purged through the dicyclopentadiene crackers and vented to the ethylene flare (EP#321 in V-00-022) as long as necessary to cool the furnaces.

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SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

2. Emission Limitations:

Refer to **Section D - Source Emission Limitations and Testing Requirements** for source wide limitations.

3. <u>Testing Requirements</u>:

- a. Pursuant to 40 CFR 65.158(a)(1) performance tests shall be conducted at maximum representative operating conditions for the process unless the Division specifies or approves alternate operating conditions.
- b. The permittee shall conduct flare compliance determinations meeting the requirements of 40 CFR 65.147(b)(3) as required by the Division.

4. Specific Monitoring Requirements:

- a. Pursuant to 40 CFR 65.143(a)(3) *Bypass monitoring*, except for pressure relief devices needed for safety purposes, low leg drains, high point bleeds, analyzer vents, and openended valves or lines, the owner or operator shall comply with either of the following provisions for each closed vent system that contains bypass lines that could divert a vent stream to the atmosphere:
 - i. Properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. The flow indicator shall be installed at the entrance to any bypass line.
 - ii. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.
- b. Proper operation of the Westlake CA&O ethylene flare (EP #321 in V-00-022) in accordance with **7. Specific Control Equipment Operating Conditions**.
- c. See Section D Source Emission Limitations and Testing Requirements for source wide monitoring requirements.
- d. Pursuant to 40 CFR 65.147(c), a device (including but not limited to a thermocouple, ultraviolet beam sensor, or infrared sensor) capable of continuously detecting that at least one pilot flame or the flare flame is present is required. Flame monitoring and compliance records shall be kept as specified in 40 CFR 65.159(c) and (d).

5. **Specific Recordkeeping Requirements:**

- a. Pursuant to 40 CFR 65.66(a), the owner or operator shall maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the process vent according to the procedures of 40 CFR 65.64(h), including those records associated with halogen vent stream determination. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified in 40 CFR 65.64(i). As specified in 40 CFR 65.67(a), the owner or operator shall include this information in the Initial Compliance Status Report.
- b. Pursuant to 40 CFR 65.159, the permittee shall keep up to date, readily accessible

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SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

records of:

i. Flare compliance determination records specified in 40 CFR 65.159(b).

- ii. The flare pilot flame continuous monitoring required under <u>4. Specific Monitoring Requirements</u> for Westlake CA&O ethylene flare (EP #321 in V-00-022) [40 CFR 65.159(c)]. These records shall be obtained from Westlake at least semi-annually in order to prepare the semi-annual monitoring report in accordance with Specific Reporting Requirements.
- iii. The times and duration of all periods during which the flare flame and all the pilot flames are absent [40 CFR 65.159(d)].
- c. Pursuant to 40 CFR 65.163(a)(1), the permittee shall record the following information:
 - i. Hourly records of whether the flow indicator specified under Specific Monitoring Requirements (above) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the control device or the flow indicator is not operating.
 - ii. Where a seal mechanism was installed in accordance with Specific Monitoring Requirements (above), hourly records of flow are not required. In such cases, the permittee shall record that the monthly visual inspection of the seals or closure mechanisms has been done and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has been broken.
- d. The occurrence, duration, cause, and any corrective action taken for each incident when the Dicyclopentadiene process units are in operation but the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with <u>7. Specific Control Equipment Operating Conditions</u>.
- e. See Section D Source Emission Limitations and Testing Requirements for source wide recordkeeping requirements.

Specific Reporting Requirements:

- a. Pursuant to 40 CFR 65.166, the permittee shall submit to the Division semiannual reports of the following recorded information:
 - i. Reports of the times of all periods when the vent stream is diverted from the control device through a bypass line;
 - ii. Reports of all times when maintenance is performed on car-sealed valves, when the seal is broken, when the bypass line valve position is changed, or the key for a lock-and-key type configuration has been checked out; and
 - iii. All periods when all pilot flames were absent or the flare flame was absent.
- b. The permittee shall submit a report of the occurrence, duration, cause, and any corrective action taken for each incident when the Dicyclopentadiene process units are in operation but the Westlake CA&O ethylene flare (EP #321 in V-00-022) is not operating in accordance with **7. Specific Control Equipment Operating Conditions** to the Division for Air Quality's Paducah Office immediately.
- c. See **Section D Source Emission Limitations and Testing Requirements** for source wide reporting requirements.

7. <u>Specific Control Equipment Operating Conditions</u>:

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SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

See **Section E - Source Control Equipment Requirements** for the Westlake CA&O ethylene flare (EP #321 in V-00-022) operating conditions.

8. Alternate Operating Scenarios:

- a. Pursuant to 40 CFR 60.660(d), the owner or operator of process vents subject to this Subpart may choose to comply with the provisions of 40 CFR part 65, Subpart D (Consolidated Federal Air Rule; Synthetic Organic Chemical Manufacturing Industry), to satisfy the requirements of 40 CFR 60.662 through 60.665 and 60.668. The provisions of 40 CFR part 65 also satisfy the criteria of paragraphs 40 CFR 60.660(c)(4) and (6). Other provisions applying to an owner or operator who chooses to comply with 40 CFR 65 are provided in 40 CFR 65.1.
- b. Pursuant to 40 CFR 60.660(d)(2), owners or operators who choose to comply with 40 CFR part 65, Subpart D, must also comply with 40 CFR 60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those process vents. All sections and paragraphs of 40 CFR 60, Subpart A that are not mentioned in this paragraph (b) do not apply to owners or operators of process vents complying with 40 CFR Part 65, Subpart D, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR Part 65, Subpart D, must comply with 40 CFR Part 65, Subpart A.

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SECTION I - COMPLIANCE SCHEDULE

None